

Update: Pneumococcal Vaccines Work Group

Advisory Committee on
Immunization Practices (ACIP)

June 27, 2007

Work group membership

- **ACIP members:**

Julie Morita (chair)
Carol Baker
Dale Morse
Kathy Neuzil

- **Liaison representatives:**

Nancy Bennet, NACCHO
Doug Campos-Outcalt, AAFP
Shelley Deeks, NACI, HCA
Lorry Rubin, AAP
William Schaffner, NFID

- **Ex Officio members:**

Lucia Lee, FDA
Kristin Nichol, VA
Ray Strikas, NVPO

- **Consultants:**

Jay Butler, Alaska DPH
Lisa Jackson, Group Health, WA
Rick Zimmerman, University of
Pittsburgh

- **CDC**

William Atkinson
Angela Calugar
Tom Hennessy
Matt Moore
Pekka Nuorti
Greg Wallace
Cynthia Whitney

Terms of reference

- Review the need and optimal timing for updated statements on the use of pneumococcal conjugate (PCV7) and polysaccharide vaccines (PPV23)
- Develop a revised statement on use of pneumococcal vaccines for ACIP review and approval

Current ACIP statements

- Prevention of pneumococcal disease, MMWR 1997
- Preventing pneumococcal disease among infants and young children, MMWR 2000
- Update and merge the current statements
 - Key issues and data that have emerged since the previous statements
 - Policy implications and options
 - Need for changes in actual recommendation?

Work Plan

- Work group established October, 2006
- Monthly conference calls
 - PCV7: January-April, 2007
 - PPV23: May-August, 2007
- Tentative timeline
 - Presentation to full ACIP in October 2007
 - What are the proposed changes to recommendations for use of PPV23 and PCV7?
 - Revised statement to be published in first half of 2008

Key issues under consideration - PCV7

- Are any changes needed to current recommendation based on data:
 - Direct and indirect PCV7 population effects
 - Non-vaccine serotype replacement
 - Trends in antimicrobial resistance
- PCV7 use and effects in special populations
 - Alaskan Native/American Indian children
- Alternative vaccine schedules with reduced number of vaccine doses

Data reviewed - PCV7

- Trends in invasive pneumococcal disease in the U.S. before and after PCV7
- Population impact of PCV7 on pneumonia hospitalizations and otitis media visits
- Increase in invasive pneumococcal disease in Alaska Native children due to serotypes not in PCV7
- Impact of 9 years of PCV7 use on IPD among Navajo

Data reviewed - PCV7 contd.

- Comparative immunogenicity of PCV7 using a 2+1 alternative dosing schedule
- Post-licensure effectiveness of PCV7 against invasive pneumococcal disease in the U.S.
- Uptake of PCV7 among children in the U.S.
- Experience with reduced PCV7 dose schedules in the U.K
- Impact of 3-dose PCV7 immunization program in the province of Quebec, Canada

Key issues under consideration - PPV23

- Vaccine effectiveness
 - Addressing contradictory data regarding vaccine effectiveness
 - Limitations of PPV23 in elderly persons and high risk groups
- Revaccination
 - Duration of protection,
 - Safety and immunogenicity of revaccination
 - Optimal timing and frequency of revaccination
- What is the overall achievable public health impact?

Data reviewed - PPV23

- Review of contemporary studies of PPV23 efficacy and effectiveness
 - Outcomes: IPD, pneumonia, mortality
 - Study designs: clinical trials, observational studies, ecologic studies
- Considerations regarding revaccination with PPV23
 - Duration of protection, safety immunogenicity and effectiveness of first revaccination
 - Safety of multiple revaccinations
 - Optimal timing and frequency of revaccination: what ages and how often?

Remaining Topics

- Possible new PPV23 target groups (risk-based)
- PPV23 programmatic/implementation issues
- Updated PPV23 and PCV7 economic studies
- Potential timelines for new pneumococcal vaccines